

## Forensic evaluation: a strategy for and results of an impact evaluation of a universal labor market program - the Swedish Activity Guarantee

Delander, Lennart; Månsson, Jonas

Veröffentlichungsversion / Published Version

Arbeitspapier / working paper

Zur Verfügung gestellt in Kooperation mit / provided in cooperation with:

SSG Sozialwissenschaften, USB Köln

### Empfohlene Zitierung / Suggested Citation:

Delander, L. M. J. (2007). *Forensic evaluation: a strategy for and results of an impact evaluation of a universal labor market program - the Swedish Activity Guarantee*. (Discussion Papers / Wissenschaftszentrum Berlin für Sozialforschung, Forschungsschwerpunkt Arbeit, Sozialstruktur und Sozialstaat, Abteilung Arbeitsmarktpolitik und Beschäftigung, 2007-102). Berlin: Wissenschaftszentrum Berlin für Sozialforschung gGmbH. <https://nbn-resolving.org/urn:nbn:de:0168-ssoar-233984>

### Nutzungsbedingungen:

Dieser Text wird unter einer Deposit-Lizenz (Keine Weiterverbreitung - keine Bearbeitung) zur Verfügung gestellt. Gewährt wird ein nicht exklusives, nicht übertragbares, persönliches und beschränktes Recht auf Nutzung dieses Dokuments. Dieses Dokument ist ausschließlich für den persönlichen, nicht-kommerziellen Gebrauch bestimmt. Auf sämtlichen Kopien dieses Dokuments müssen alle Urheberrechtshinweise und sonstigen Hinweise auf gesetzlichen Schutz beibehalten werden. Sie dürfen dieses Dokument nicht in irgendeiner Weise abändern, noch dürfen Sie dieses Dokument für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, aufführen, vertreiben oder anderweitig nutzen.

Mit der Verwendung dieses Dokuments erkennen Sie die Nutzungsbedingungen an.

### Terms of use:

This document is made available under Deposit Licence (No Redistribution - no modifications). We grant a non-exclusive, non-transferable, individual and limited right to using this document. This document is solely intended for your personal, non-commercial use. All of the copies of this documents must retain all copyright information and other information regarding legal protection. You are not allowed to alter this document in any way, to copy it for public or commercial purposes, to exhibit the document in public, to perform, distribute or otherwise use the document in public.

By using this particular document, you accept the above-stated conditions of use.

Lennart Delander<sup>\*)</sup>  
Jonas Månsson<sup>\*) \*\*)</sup>

**Forensic evaluation:  
A strategy for and results of an  
impact evaluation of a universal  
labor market program –  
The Swedish Activity Guarantee**

<sup>\*)</sup> Centre for Labor Market Policy Research  
Växjö University, SE 35195 Växjö, Sweden  
e-mail: lennart.delander@ehv.vxu.se

<sup>\*\*)</sup> National Institute for Working Life  
SE 62157 Visby, Sweden  
e-mail: jonas.mansson@arbetslivsinstitutet.se

January 2007

ISSN Nr. 1011-9523

Wissenschaftszentrum Berlin  
für Sozialforschung (WZB)  
Social Science Research Center Berlin

**Research Area:**  
Employment, Social Structure, and Welfare State

**Research Unit:**  
Labor Market Policy and Employment  
<http://www.wzb.eu/ars/ab/>

**Order no.: SP I 2007-102**



## **ABSTRACT**

To evaluate the effects of a universal program, i.e. all targeted get access, is associated with the problem that there are no individuals who represent the hypothetical or counterfactual state of being eligible to the program but not participating in it. In this study of a Swedish universal labor market program – the “Activity Guarantee” – we show how regional differences in the implementation of instructions on assignment to the program were utilized to create a control group representing the counterfactual state.

After having gained access to a treatment and a control group, the authors evaluated the effects of the program on the probability of leaving unemployment and on the duration of unemployment. The effects estimated were statistically significant and indicate a clear positive effect of program participation.

## **ZUSAMMENFASSUNG**

In dieser Analyse wird das Evaluierungsproblem untersucht, das entsteht, wenn die Effekte eines Programms untersucht werden sollen, das einschränkungslos für alle Mitglieder einer Zielgruppe gilt. Dann nämlich gibt es nicht mehr die Fälle, die den gegenteiligen Zustand repräsentieren, d.h. Anspruchsberechtigte, die nicht an dem Programm teilnehmen. In dieser Studie über ein in diesem Sinne universelles Arbeitsmarktprogramm in Schweden mit dem Titel „Aktivitäts-Garantie“ wird gezeigt, wie regionale Unterschiede bei der Umsetzung der Vorschriften zur Zuweisung in das Programm genutzt werden, um eine Kontrollgruppe zu bilden.

Nachdem der Zugang zu den Daten einer Teilnehmergruppe und einer Kontrollgruppe geklärt war, evaluierten die Autoren die Effekte des Programms auf die Abgangswahrscheinlichkeit aus und auf die Dauer der Arbeitslosigkeit. Die geschätzten Effekte waren statistisch signifikant und belegen einen eindeutig positiven Effekt einer Teilnahme an dem Programm.



## **Inhalt**

|           |  |           |
|-----------|--|-----------|
| <b>1.</b> | <b>Introduction.....</b>                                 | <b>1</b>  |
| <b>2.</b> | <b>The Activity Guarantee.....</b>                       | <b>1</b>  |
| <b>3.</b> | <b>Finding the treatment and the control group .....</b> | <b>5</b>  |
| <b>4.</b> | <b>Evaluation of effects of the program .....</b>        | <b>12</b> |
|           | Effects on the probability to leave unemployment .....   | 12        |
|           | Effects on the duration of unemployment .....            | 15        |
| <b>5.</b> | <b>Concluding remarks .....</b>                          | <b>16</b> |
|           | <b>References.....</b>                                   | <b>17</b> |
|           | <b>Appendix.....</b>                                     | <b>19</b> |



## 1. Introduction

This article addresses two objectives. *Firstly*, it aims at showing how regional differences in the implementation of a universal labor market program can be used to solve the problem of finding a control group to participants of the program. The essence of the evaluation problem as regards universal programs is that, strictly speaking, there is no group of persons representing the counterfactual state of being qualified for assignment to the program but never taking part in it. For politicians and policymakers this creates a problem as regards the possibilities of finding out the effects or efficiency of a program in progress. Universal programs are often subjected only to target-oriented evaluations. This is the reason why we were commissioned by the Swedish Ministry of Industry, Employment and Communications to investigate if it was at all possible to conduct an effect evaluation of a program called the Activity Guarantee. This is a universal labor market program targeted towards unemployed registered at public employment offices that are or are at the risk of being long-term unemployed. *Secondly*, since we think a way was found out of the dilemma as regards finding an adequate control group, the article also presents results of effect estimations. These show the effects of participating in the Activity Guarantee on the probability of leaving unemployment and on the duration of unemployment

In Section 2 there is a brief presentation of the design and objectives of the Activity Guarantee. Section 3 addresses the question of finding a control group representing the counterfactual state of not participating in the program. Results of the effect evaluation are presented in Section 4. Some reflections on the method to solve the evaluation problem and on the results of effect estimations conclude the article in Section 5.

## 2. The Activity Guarantee

In Sweden, payments from the unemployment insurance have a limited duration of 300 days. At administrative discretion, benefit eligibility can, however, be prolonged for a second, and last period of another 300 days. In 2000, the Activity Guarantee was introduced for persons, registered at public employment offices, who are or are at the risk of becoming long-term unemployed, including those whose unemployment benefit eligibility is about to run out. A person, who approaches the end of the first unemployment benefit period, will be granted a second period of unemployment benefit payments if he or she is considered likely to find a job in “the near future”. If this is not the case, the job seeker will be assigned to the Activity Guarantee, which is a framework within which all other labor market programs can be used. Job seekers who are still unemployed when they



have exhausted the second unemployment benefit period are assigned to the Activity Guarantee.

In the Government's proposal to the *Riksdag* (the Swedish parliament), the purposes of the activity guarantee were described as follows (Government Bill 1999/2000:98. *Our translation*):

"The activity guarantee is a full-time activity. It has four objectives: Firstly, it aims at giving the unemployed an enduring activity until he or she has either obtained employment on the open labor market or, as a step on the road to such employment, taken up education in the regular educational system.

Secondly, an objective of the activity guarantee is to break up the cycling between participation in labor market programs and open unemployment. To achieve this goal, the unemployed is offered a full-time activity, where 'full-time' is defined in terms of the person's labor supply, i.e., desired working time. Support and stimulation will counteract inactivity. Thereby, the program represents an especially active form of labor market policy that is characterized by the unemployed having more frequent contacts with his or her employment counselor and participating in a more coherent program.

Thirdly, the activity guarantee will ensure that the unemployed will be actively looking for job opportunities also when participating in a labor market program. This will prevent the development of unemployment habits and values where repeated long periods of open unemployment are considered as a natural course of life. The activity guarantee will also make it possible for the Employment Service to prevent improper use of the unemployment insurance by offering the unemployed a full-time activity. Active job search by the unemployed is also fair towards those who have work and finance the unemployment insurance.

A fourth objective of the activity guarantee is to develop methods to make it easier to activate those who are hit by the structural problems of sparsely-populated areas and by the segregation in big cities where immigrants have very low employment rates."

Participants in the Activity Guarantee take part either in job search based on organized activities at the employment office or in regular labor market programs. County labor market boards can enter into agreements with municipalities, other authorities, and firms regarding activities that can be offered participants of the Activity Guarantee. In such cases, the employment office still has the full responsibility for the activities and for monitoring the participants' job search. Participants can only leave the Activity Guarantee by working in a regular job for at least six months, by taking up regular education, or by leaving the labor force.<sup>1</sup> To a great extent, participants are recruited from that category of unemployed that no longer obtain any job offers, which means that they, in practice, are ex-

---

1 For a more detailed presentation of the program see e.g. Forslund et.al. (2004).

cluded from the labor market—they do not belong to the effective supply of labor. This means that *if* the scheme works according to its intentions, the effective supply of labor will increase, which can have positive effects on total employment (Bellman and Jackman 1996). A leading idea behind the Activity Guarantee is that increased intensity of job search will increase the probability of obtaining employment (see e.g. van den Berg and van der Klaauw 2001, van den Berg and Richardson 2002).

The Government's original proposal did not state when, at the latest, unemployed were to be assigned to the Activity Guarantee. After its introduction it has, however, been decided that persons belonging to the target group shall be offered participation in the program at the latest after having been registered at an employment office for 27 months. A person who is entitled to payment from the unemployment insurance and who refuses, without acceptable reason, to accept an offer of participation in the Activity Guarantee will have the amount of unemployment compensation reduced. In this respect, the rules are the same as for those who turn down participation in other labor market policy program. Participants obtain either compensation corresponding to the unemployment benefit or contractual wage for such subsidized employment that is being held during the time when they are registered in the Activity Guarantee. There is no time limit for participation in the Activity Guarantee—according to the Government Bill, participation will continue “as long as it is warranted from a labor market policy point of view”. Apart from being suspended from the program or leaving it voluntarily, a participant can leave the Activity Guarantee only by either having had regular employment for at least six months<sup>2</sup> or having taken up regular education.

There is no official figure as regards total expenditure on the Activity Guarantee. According to an estimate made by the National Audit Office, however, 3.9 billion SEK (about 422 million EUR) was spent 2004 on program activities and on income support to participants (Riksrevisionen 2005, pp 31–32).<sup>3</sup> Table 1 shows figures on the number of assignments to the Activity Guarantee 2000–2004. To give a notion of the relative size of the program, the figures are also related to the inflow of unemployed job seekers into the registers of public employment offices and to the stock of unemployed job seekers.

---

2 A person who has obtained regular (unsubsidised) employment will, therefore, remain registered in the Activity Guarantee for a period of six months after having taken up the job.

3 It should be pointed out that this amount does not represent the fiscal opportunity cost of the program. A considerable share of the amount represents taxable income support to participants. In absence of the Activity Guarantee, the unemployed who participated in it would have received other types of public assistance.

**Table 1**      *Number of persons entering the Activity Guarantee per year and in relation to number of new-registered and the average number of registered unemployed*

|      | Number of persons<br>assigned to the Activity<br>Guarantee during the year | Percent of number of<br>new registered<br>unemployed (flow) | Percent of the average<br>number of unemployed<br>(stock) |
|------|--|---|---|
| 2000 | 25 400   | 3.3   | 7.4   |
| 2001 | 24 300   | 3.8   | 8.0   |
| 2002 | 17 100   | 2.6   | 5.7   |
| 2003 | 11 900   | 1.7   | 3.8   |
| 2004 | 16 550   | 2.1   | 4.1   |

Assignment to the Activity Guarantee was at its peak during the first two years: 25,400 individuals in 2000 and 24,300 in 2001. This is mainly explained by the fact that, when the program started, there was a large stock of unemployed that belonged to its target group. During the following years the program was filled up with unemployed as they came to be eligible for the program.

To sum up: The overall objective of the Activity Guarantee is to improve the participants' position on the labor market and to prevent them from being marginalized. The Activity Guarantee distinguishes from other active labor market policy programs by intensified placement and counseling activities, increased surveillance of participants' job search, and an unspecified duration.

Up to 2000, completion of participation in a labor market policy program provided participants with eligibility for a new period of compensation from the unemployment insurance. As a result, programs partly came to be used to renew unemployment benefit eligibility rather than to strengthen participants' possibilities on the labor market. Since this had negative effects on the results of labor market programs, the system was changed and program participation no longer renews unemployment benefit eligibility. Instead, the Activity Guarantee, with its indefinite duration, provides long-term unemployed with income support. If the Activity Guarantee functions as intended, increased placement and counseling services can be expected to increase the rate at which individuals leave unemployment. The effect of increased monitoring of job search is more ambiguous. If it, in the main, concerns formal search and results in a substitution away from informal search to formal search, the effect depends on the initial level of search through informal channels.<sup>4</sup>

---

4 The effects of counselling and monitoring activities are analyzed in van den Berg and van der Klaauw (2001).

### 3. Finding the treatment and the control group

When making an effect evaluation of a labor market program, the question that receives attention is the effect on participants of the program compared to the alternative of not participating—on the implicit assumption that there is only one program. Then, the evaluation question of interest is:

*Q.1 What is the labor market outcome for program participants relative to what would have occurred in the absence of the program?*

The core problem is that one and the same person cannot be in two labor market states at the same time; the person cannot simultaneously be participating and not participating in a program. For a participant, we cannot know the outcome if he or she had not participated; there is a counterfactual state that is not observable.

Furthermore, labor market policy is made up of many different programs. Therefore, question Q.1 can be reformulated to read:

*Q.2 With a labor market policy consisting of  $x$  programs, what is the labor market outcome for participants in program  $P$  relative to what would have occurred in the absence of just that program?*

If program  $P$  is the Activity Guarantee, the counterfactual state means being qualified for assignment to this program but never taking part in it. The Activity Guarantee is, however, a universal labor market policy scheme which is open not only to those who, according to judgments by employment office staff, are at risk of becoming long-term unemployed but also to all who are long-term unemployed and whose unemployment benefit eligibility is about to run out. Participation in the Activity Guarantee is thus offered both to persons who risk long-term unemployment and to persons who are long-term unemployed. There is always the possibility of participating in the program at a later point in time and, therefore, no group of persons represents the counterfactual state (cf. Carling and Larsson 2000). This is the essence of the problem with which we were confronted, when commissioned by the Ministry of Industry to investigate the possibilities of making an effect evaluation of the Activity Guarantee.

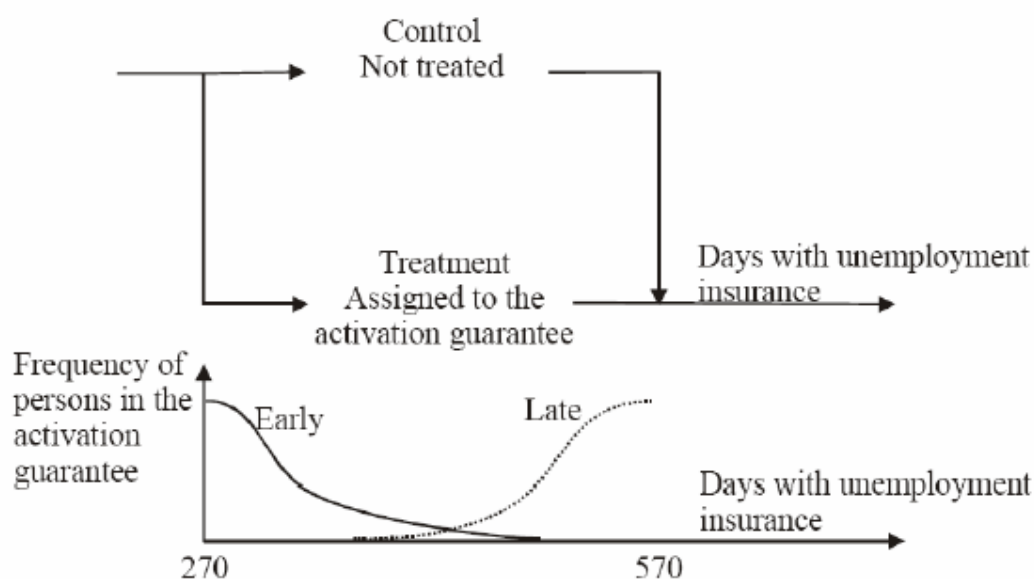
We therefore started with a broad exploration to see if we could find some variation in the data regarding participation or no participation in the program that might originate from other factors than individual characteristics. When all persons, who are eligible to a program, belong to the factual state and no one belongs to the counterfactual state, an obvious solution to the problem just mentioned would be to block some of the eligible persons from participating in the program. When question Q.2 is of interest, persons who are hindered from participating in program  $P$  should be allowed to participate in other programs. As a

result of blocking, eligible persons who are excluded from participation in the program to be evaluated represent the counterfactual state. With this in mind, and being well aware of the difficulties to intervene in an on-going program, we applied our energies to detective work to see if we could find features in the way the Activity Guarantee was implemented in the field, which could be supposed to produce a result resembling that of blocking.

What opened up a possibility, was information in a report from the Inspection of Unemployment Insurance (IUI) according to which different regional labor market boards, and their employment offices, interpreted in different ways the directions about when to assign an unemployed job seeker to the Activity Guarantee (IUI 2004). The report says that: *"...there are signs that there exist large differences in how different employment offices interpret the rules for assignment to the Activity Guarantee..."* For a person who has drawn unemployment benefit for 270 days (i.e. who is approaching the end of the benefit period), counselors at the employment office have to evaluate the person's chances to pass on to either employment, regular education, employment training or another labor market program. If the prospects for such a transition are judged to be good, the employment office can suggest prolongation of unemployment benefit with a second (a final) period of 300 days. If not, the person is to be assigned to the Activity Guarantee. In another report, IUI pointed out that the labor market boards in some regions interpreted the assignment directions differently and practiced an assignment policy which meant that persons, who had exhausted 300 days of unemployment benefit payments, almost invariably, at least to a very great extent, were assigned to the Activity Guarantee. Having been unemployed for 300 days was, by employment offices in these regions, interpreted as a sign in itself of poor prospects for such transitions as mentioned above. In other regions, the majority of those who were assigned to the Activity Guarantee had reached the end of the second unemployment benefit period, i.e. job seekers who had drawn unemployment benefit for 600 days. (IUI 2005) For brevity's sake, we will in the following describe the two principles as "early" and "late assignment" and refer to unemployed being subjected to "early" and "late treatment" respectively.

Three regions were identified as practicing early assignment, whereas employment offices in 21 regions were classified as offices having late assignment as a principle. These findings were the starting point for our identification of a treatment and a control group. In principle, we have identified an early treatment group and a late treatment group. Since the variation between the groups is explained by employment offices practicing different implementation principles, it will be independent of the characteristics of the individuals; the variation in the data is random. The principle for construction the two groups is illustrated in Figure 1.

**Figure 1** *Illustration of the difference between the control and the treatment group*



The upper part of Figure 1 illustrates that the treatment and the control group are determined by the length in the unemployment insurance. The lower part of the figure indicates the different assignment policies. In regions with early treatment, most individuals are assigned to the program at the end of the first unemployment benefit period. Also in these regions, however, some unemployed will be assigned later. This can be the case if, for example, the prospects for a person to get an employment were judged to be good at the end of the first period, but these expectations were not fulfilled. Also in regions with late treatment, there is some variation; some persons are assigned early to the program, while most unemployed are assigned late.

One problem is that in the regions with early treatment, some selection is made. Those with a high probability of leaving unemployment in the near future will not be assigned to the Activity Guarantee. A corresponding selection cannot be applied in regions with late assignment since unemployment benefit can only be obtained for a maximum of 600 days—after 600 days, participation in the Activity Guarantee is the social assistance alternative at hand for a person who is then still unemployed. To be able to construct a treatment and a control group, we need to take this selection process into consideration.

Also in this respect, the information in the report from IUI (2005) could be used. On basis of case studies the report identifies several individual characteristics that influence the probability of being assigned to the Activity Guarantee. For example, people who are close to retirement are less likely to be assigned into the

Activity Guarantee. Since the retirement age in Sweden is 65 years, a dummy variable was created which indicates if a person is above 61 years of age. Another reason to refrain from assigning a person to the program is if his or her employment office counselor estimates that there are good prospects for the person in the near future to get a job or begin to participate in an education. Finally, persons who are part-time unemployed are less likely to be assigned to the guarantee. This information was used to formulate a probit model that predicts the probability of being assigned to the Activity Guarantee (see e.g. Maddala 1983). The data for the probit estimation consists of information about all individuals in regions with early treatment who have had unemployment benefit for 270 days; the dependent variable of the probit equation indicates if the individual has been or assigned to the Activity Guarantee or not. The results are presented in Table 2. Descriptive statistics are shown in Table A.1 in the Appendix.

One question raised early in the investigation was if the assignment to the program was gender neutral. The fact that the coefficient for Female is statistically insignificant indicates that this was the case. According to the instructions for assignment to the Activity Guarantee, employment office counselors were to judge the likelihood for a person, approaching the end of the unemployment compensation period, to leave unemployment. We do not directly have this type of information about individuals in our data set and, therefore, we had to construct a proxy-variable. It shows if a person actually has left unemployment within 120 days after a decision in favor of prolonged payment of unemployment benefit was taken. This variable will be highly correlated with the probability of exit from unemployment if we assume that employment office counselors have good knowledge about their job seeker and are reasonably good at judging the prospects for them to leave unemployment. We are confident that this is a realistic assumption. And, in fact, the probit estimation revealed that our proxy variable was associated with a strong effect. The probability of being assigned to the Activity Guarantee is 24 percentage points lower for a person who has left unemployment within 120 days after the final phase of the unemployment benefit period.

Another characteristic, pointed out by the IUI, is that persons who are close to retirement tend to have lower probability of being assigned to the Activity Guarantee. According to our estimation, this probability is 19 percentage points lower for unemployed who are at least 62 years old.

In the population of our study there were persons who were only part-time unemployed.<sup>5</sup> Therefore, we have also controlled for whether the individual had an employment contract, stipulating part-time work or employment by the hour (tem-

---

5 The regulations of the Swedish unemployment insurance system entitle persons who have lost a full-time job, and who work part-time, to partial unemployment benefit as a supplement to wage income on condition that they register at an employment office.

**Table 2**      *The probability to be assigned to the Activity Guarantee  
in regions with early treatment*

|   | Marginal effect<br>Percentage<br>points | Standard<br>Error x 100 |
|---|---|-------------------------|
| Female  | 1.06                                    | 0.70                    |
| Age   | 0.23**                                  | 0.00                    |
| Age > 61  | -18.72**                                | 1.10                    |
| Expected to leave unemployment within 120 days  | -24.19**                                | 0.80                    |
| Having a part-time or temporary employment contract   | -32.29**                                | 0.80                    |
| Searches only part-time work  | 3.20**                                  | 0.70                    |
| Search only full-time work  | -2.64                                   | 1.40                    |
| Prepared to move  | 4.09**                                  | 1.00                    |
| Has relevant education  | -2.54**                                 | 0.70                    |
| Has relevant work experience  | 1.03                                    | 0.90                    |
| Upper secondary school  | 0.04                                    | 0.80                    |
| University  | -5.74**                                 | 0.90                    |
| <i>Immigrant from country in:</i>   |   |                         |
| Scandinavia   | 1.06                                    | 2.40                    |
| Western Europe, North America, Oceania  | 1.09                                    | 2.70                    |
| Eastern Europe  | -0.98                                   | 2.00                    |
| Other area  | 2.26                                    | 2.30                    |
| <i>Handicap</i>   |   |                         |
| Impaired vision/hearing   | -2.69                                   | 3.10                    |
| Other physical handicap   | -0.71                                   | 1.00                    |
| Social/mental handicap  | -1.84                                   | 1.80                    |
| Length of time registered at the employment office before<br>decision   |   |                         |
| (assignment or no assignment to the Activity Guarantee)   | 0.00                                    | 0.00                    |
| Unemployment duration before decision   |   |                         |
| (assignment or no assignment to the Activity Guarantee)   | -0.05**                                 | 0.00                    |
| The sum of days registered at the employment office<br>during the last 6 years before decision (guarantee or not)                                     | -0.01**                                 | 0.00                    |
| The sum of number of days in unemployment for the last<br>6 years period before decision (assignment or no as-<br>signment to the Activity Guarantee) | 0.02**                                  | 0.00                    |
| Number of unemployment spells   | -3.15**                                 | 0.10                    |
| Number of labor market programs in which the person<br>has participated during the last 6 years before decision                                       |   |                         |
| (assignment or no assignment to the Activity Guarantee)   | 9.61**                                  | 0.20                    |
| Decision in 2002  | 4.76**                                  | 1.10                    |
| Decision in 2003  | -4.91**                                 | 1.10                    |
| Decision in 2004  | 27.05**                                 | 1.10                    |

\*\* significant at the 1 percent level, \* significant at the 5 percent level.  
Log likelihood = 15 300; Pseudo R<sup>2</sup> = 0.22



porary employment), at the point of time when decision about assignment to the Activity Guarantee was to be taken. The estimate indicates that having an employment contract, i.e. being part-time unemployed, decreased the probability of being assigned to the Activity Guarantee by 32 percentage points.<sup>6</sup>

Since the model was to be used for predictions, it should be reasonably good at predicting group affiliation. For each individual in our population who was registered at an employment office practicing early assignment to the Activity Guarantee, the probability to be assigned to the program was computed and compared with how it was in reality. The results are shown in Table 3.

**Table 3** *Prediction of group affiliation*

|              |              | Predicted group |                |        |  |
|--------------|--------------|-----------------|----------------|--------|--|
|              |              | Not assigned    | Assigned       | Sum    |  |
| Actual group | Not assigned | 12 383 (78.2 %) | 3 453 (21.8 %) | 15 836 |  |
|              | Assigned     | 4 033 (31.8 %)  | 8 657 (68.2 %) | 12 690 |  |
|              | Sum          | 16 416          | 12 110         | 28 526 |  |

Of the persons in the population of the study  $[(12\,383 + 8\,657) : 28\,526] \times 100 \cong 73.8\%$  were correctly classified, i.e. more than 7 out of 10. The model classified approximately 68 percent of persons who had, and 78 percent of those who had not been assigned to the program into the correct group. The distribution of the probabilities in intervals of 2 percent (0–2%, 2–4%, ..., 98–100%) is shown in Figure 2.

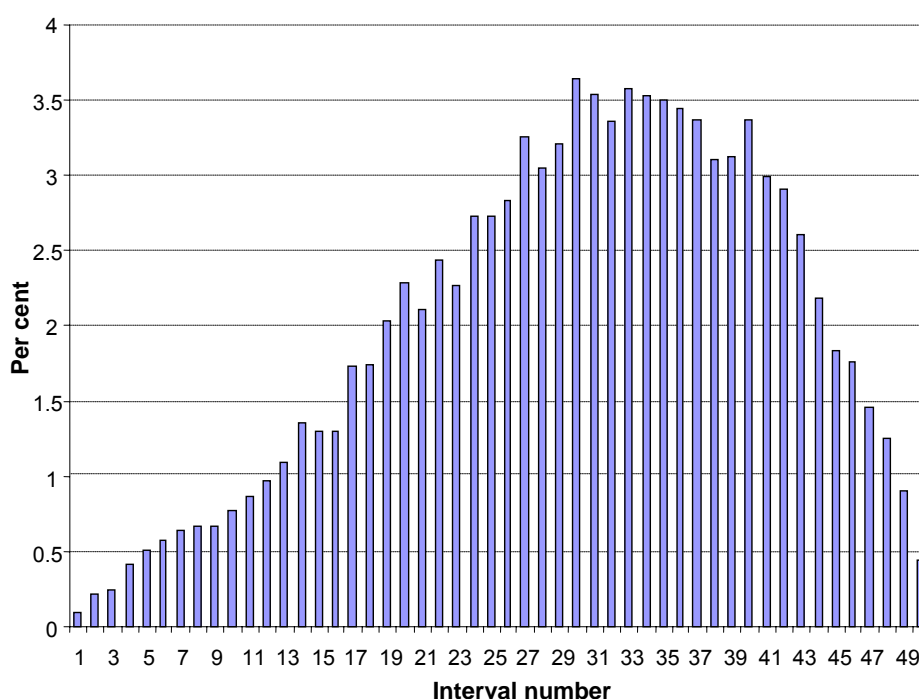
In the second step of the identification process, the estimates presented in Table 2 were used. Persons in regions where late assignment to the program was practiced were identified after the first unemployment benefit period of 300 days had run out. The results in Table 2 were then used to *compute* the predicted probability for these individuals of being assigned to the program. Also these individuals were classified into intervals, depending on their computed probability of assignment. On basis of the number of individuals in each interval, in regions where early assignment was practiced, we then randomly selected the same number of persons from the same probability interval among individuals in regions with late assignment.<sup>7</sup> At the end of this identification process, we ended up with two

6 Nyberg (2003) points out that only 3.5 percent of the part-time unemployed who reach 300 full unemployment insurance days have been assigned to the Activity Guarantee.

7 This method to create control groups is called propensity score matching and was first introduced by Rosenbaum and Rubin (1983). See also Angrist and Krueger (1999), Rosenbaum (2002). Applications on Swedish data are found in, for example, Johansson and Martinsson (2001) and Delander et al. (2005). It deserves to be mentioned that there are other matching methods. Instead of using intervals and random selection, one could identify matched pairs with the same or similar values of individual probability (see e.g. Delander et al., 2005) or use an average of those individual who are most similar (Kernel) (see e.g. Hägglund 2006). For a discussion about different methods see Rosenbaum (2002).

groups: one group of 12 690 persons who had been assigned early to the activation guaranty, in the following occasionally referred to as the treatment group, and another group, serving as control, with the same number of persons who had the same probability of being assigned to the program after 300 days, but who belonged to a region where late assignment was practiced. One way of considering the two groups is to imagine that if a person, whose first period of unemployment benefit has come to an end, moves from a late to an early assignment region, he or she would be recruited to the Activity Guarantee. In other words, for persons in our two groups assignment to the program is independent of individual characteristics.<sup>8</sup>

**Figure 2** *Percentage of persons in different probability intervals*



<sup>8</sup> A potential problem is that the local labor market situation could vary between regions. One indicator of the local labor market conditions is the unemployment/vacancy ratio (U/V-ratio). In our case, the average U/V-ratio for the observation period in regions with early treatment is 9.4 and in control regions 6.2. In fact, the U/V-ratio is higher for all years in the early treatment regions. This indicates that the local labor market conditions are slightly worse in these regions. If local labor market conditions significantly affect the outcome, our estimates will be biased downwards, i.e. underestimating the effect. A more rigorous method to control for this, based on local labor markets, is presented in Forslund et al. (2005). Unfortunately, we only have two local labor market regions that have persons in both the control and the treatment group. Therefore it is impossible to use the method proposed, due to too few observations.

## 4. Evaluation of effects of the program

The evaluation of the Activity Guarantee consists of two parts, viz. estimates of effects on the probability to leave unemployment and on the rate of leaving unemployment for full-time employment on the open market. The descriptive statistics, which are the same for both analyses, with the exception, of course, of the dependent variable, are presented in Table A.2 in the Appendix.<sup>9</sup>

Which outcome to be used as dependent variable in the effect estimates is not a matter of course. Certainly, the overall objective for the public employment service is to help unemployed job seekers to find regular employment. A full-time job on the open market is the ultimate destination for its clients. However, according to the intentions of the Activity Guarantee, also placements in jobs with wage subsidies and transitions to regular education (education that is not financed by the employment office) are also counted for as successful outcomes of placement and counseling activities. Regardless of this, however, this study concentrates upon transitions to regular, unsubsidized full-time jobs.<sup>10</sup>

### *Effects on the probability to leave unemployment*

At the end of the observation period 2 018 persons (15.9 percent) in the treatment group had a full time job without subsidy while the corresponding figure in the control group was 1 895 persons (14.9 percent). To evaluate the effect on the probability to leave unemployment for a full-time job on the open labor market, a probit model is used. The results of probit estimates are presented in Table 4.

According to Table 4, the estimated marginal effect of our evaluation variable is positive and statistically significant at the 1 percent level. The fact that the marginal effect is 1.86 should be interpreted as that a person who received early treatment had 1.86 percentage points higher probability to leave unemployment for a full-time unsubsidized job compared to those who had to wait longer before they were assigned to the Activity Guarantee. The obvious question that presents itself is if this is a large or small effect. It is undoubtedly a small effect in terms of percentage points. However, it should be kept in mind that the program was targeted toward unemployed job seekers with poor employment prospects. We, certainly, do not have any estimate of the initial probability of exit from unem-

---

9 The data system used to register participation in the Activity Guarantee was not in working order between August 1 and December 31, 2000. The analysis is, therefore, based on those who were registered in the Activity Guarantee during the period January 1, 2001–December 31, 2004 and these job seekers are followed in the register until May 31, 2005.

10 An analysis has also been performed on basis of the two other definitions of successful transitions and the results point in the same direction.

**Table 4**      *The marginal effect of leaving unemployment for full time employment*

|   | <i>Marginal effect-<br/>Percentage points</i> | <i>Standard<br/>error × 100</i> |
|---|---|---------------------------------|
| <i>Evaluation variable</i>  |   |                                 |
| Early treatment   | 1.86**  | 0.44                            |
| <i>Control variables</i>  |   |                                 |
| Female  | -2.45**                                       | 0.44                            |
| Age   | -0.34**                                       | 0.02                            |
| Age >61   | -10.54**                                      | 0.58                            |
| Searching only full-time employment   | 0.62  | 0.45                            |
| Searching only part-time employment   | -0.57   | 1.12                            |
| Prepared to move  | 0.12  | 0.57                            |
| Relevant education  | 3.27**  | 0.45                            |
| Relevant work experience  | 0.28  | 0.58                            |
| <i>Education</i>  |   |                                 |
| Upper secondary school  | 2.66**  | 0.54                            |
| University  | 4.83**  | 0.73                            |
| <i>Immigrant from</i>   |   |                                 |
| Nordic country  | 2.91  | 1.63                            |
| Western Europe, North America, and Oceania  | -3.03   | 1.63                            |
| Eastern Europe  | 0.17  | 1.40                            |
| Other area  | -1.41   | 1.11                            |
| <i>Handicap</i>   |   |                                 |
| Impaired vision/hearing   | -9.21**                                       | 1.11                            |
| Other physical handicap   | -6.47**                                       | 0.52                            |
| Social/mental handicap  | -10.43**                                      | 0.53                            |
| <i>The situation before entering the Activity Guarantee or obtaining prolonged unemployment benefit</i> |   |                                 |
| The person was only registered as unemployed  | 1.10*   | 0.45                            |
| Sum of the number of registered days at the employment office during the last 6 years                   | 0.00**  | 0.00                            |
| Sum of the number of days in unemployment during the last 6 years                                       | 0.00**  | 0.00                            |
| Sum of number of times registered as unemployed during the last 6 years                                 | 0.16*   | 0.08                            |
| Number of labor market programs during the last 6 years   | -0.39**                                       | 0.13                            |
| Number of changes of job seeker category at the employment office during the last 6 years               | -0.75**                                       | 0.06                            |
| <i>Year</i>   |   |                                 |
| 2002  | -3.20**                                       | 0.57                            |
| 2003  | -5.82**                                       | 0.53                            |
| 2004  | -10.66**                                      | 0.54                            |

\*\* significant at the 1 percent level, \* significant at the 5 percent level.  
LL=9 868, Pseudo R<sup>2</sup> =0.09

**Table 5** Cox-regressions regarding transitions to full-time employment

|   | Coefficient $\beta$ | Standard Error | Exp( $\beta$ ) |
|---|---------------------|----------------|----------------|
| <i>Evaluation variable</i>  |                     |                |                |
| Early treatment   | 0.193**             | 0.034          | 1.212**        |
| <i>Control variables</i>  |                     |                |                |
| Female  | -0.179**            | 0.034          | 0.836**        |
| Age   | -0.026**            | 0.002          | 0.974**        |
| Age >61   | -1.608**            | 0.159          | 0.200**        |
| Searching only full-time employment   | 0.019               | 0.034          | 1.019          |
| Searching only part-time employment   | -0.067              | 0.099          | 0.935          |
| Prepared to move  | -0.018              | 0.043          | 0.982          |
| Relevant education  | 0.274**             | 0.037          | 1.316**        |
| Relevant work experience  | -0.008              | 0.043          | 0.992          |
| <i>Education</i>  |                     |                |                |
| Upper secondary school  | 0.218**             | 0.044          | 1.244**        |
| University  | 0.388**             | 0.050          | 1.475**        |
| <i>Immigrant from</i>   |                     |                |                |
| Nordic country  | 0.176               | 0.107          | 1.193          |
| Western Europe, North America, and Oceania  | -0.248              | 0.159          | 0.780          |
| Eastern Europe  | 0.014               | 0.104          | 1.014          |
| Other area  | -0.072              | 0.093          | 0.931          |
| <i>Handicap</i>   |                     |                |                |
| Impaired vision/hearing   | -1.238**            | 0.290          | 0.290**        |
| Other physical handicap   | -0.636**            | 0.064          | 0.530**        |
| Social/mental handicap  | -1.410**            | 0.149          | 0.244**        |
| <i>The situation before entering the Activity Guarantee or obtaining prolonged unemployment benefit</i> |                     |                |                |
| The person was only registered as unemployed  | 0.094**             | 0.036          | 1.098**        |
| Sum of the number of registered days at the employment office during the last 6 years                   | 0.000**             | 0.000          | 1.000**        |
| Sum of the number of days in unemployment during the last 6 years                                       | 0.000**             | 0.000          | 1.000**        |
| Sum of number of times registered as unemployed during the last 6 years                                 | 0.007               | 0.006          | 1.007          |
| Number of labor market programs during the last 6 years   | -0.029**            | 0.011          | 0.972**        |
| Number of changes of job seeker category at the employment office during the last 6 years               | -0.075**            | 0.005          | 0.928**        |
| <i>Year</i>   |                     |                |                |
| 2002  | 0.419**             | 0.054          | 1.521**        |
| 2003  | 0.930**             | 0.062          | 2.536**        |
| 2004  | 1.980**             | 0.066          | 7.245**        |

\*\* significant at the 1 percent level, \* significant at the 5 percent level.

LL = 34 550  $\chi^2_{d.f.=27} = 3726$

ployment but if, for example, the probability of entering full time employment at a given point of time was only 5 percent initially, it would as an effect of early treatment rise to 6.86 percent, i.e. an increase of 37.2 percent. In that case, the estimated effect could be considered quite large.

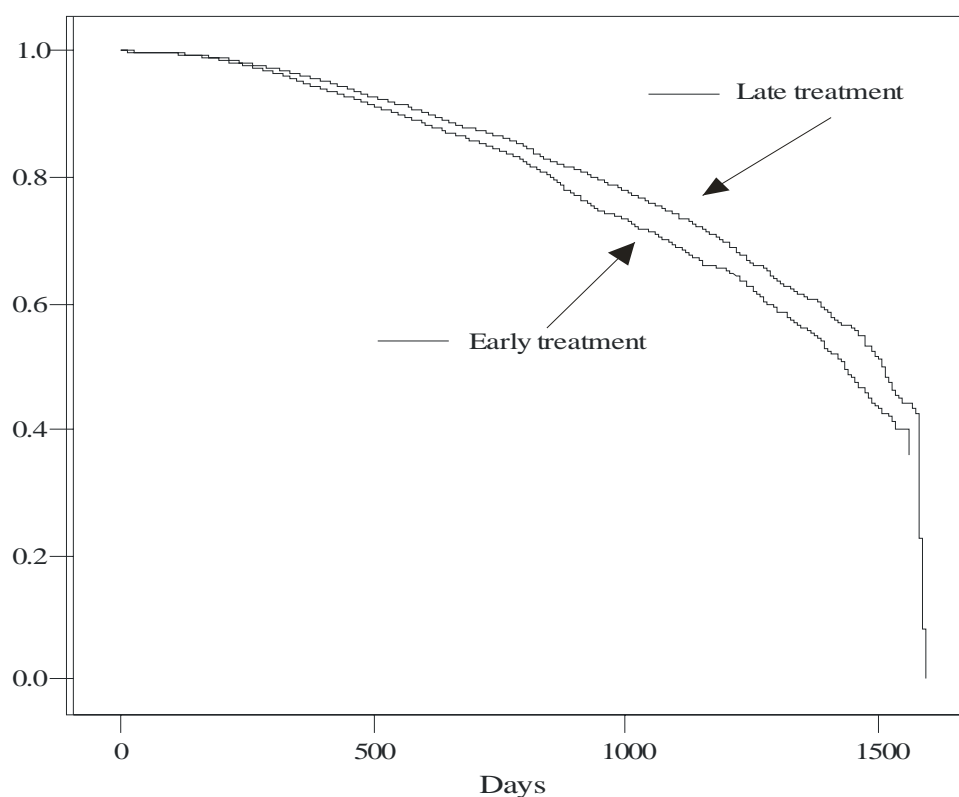
### *Effects on the duration of unemployment*

To investigate the effects on unemployment duration, a Cox-proportional hazard model was used (see e.g. Yamaguchi 1991). The censoring in the model occurs at the end of the observation period, i.e. job seekers in our population who have not received a full time, unsubsidized job at that point of time were treated as censored. Results of estimates are presented in Table 5.

To interpret the coefficients ( $\beta$ ), we start by computing  $\exp(\beta)$  and thereby get a measure of the effect on the probability to leave unemployment. If this computed value is above 1, it indicates a positive effect on the probability to leave unemployment for a full-time job without wage subsidy, and a value below 1 indicates a negative effect on this probability. The effect is computed as  $\exp(\beta) - 1$  for positive effects and  $1 - \exp(\beta)$  for negative effects (see e.g. Blossfeld et al., 1989). The coefficient for the effect variable is here 0.193, and the effect is therefore  $\exp(0.193) = 1.212$ . This means that an individual who entered the Activity guarantee early had 21.2 per cent higher probability of having a full-time, unsubsidized job at a given point of time, compared to those who had to wait longer before entering this program. To illustrate the results, a survival plot can be used. In this case, the term 'survival' refers to the probability for a person to stay (survive) in unemployment at a specific time. In Figure 3, the probability to survive is measured along the vertical axis and the duration, in days, of unemployment is measured along the horizontal axis.

Since the survival curve representing those who have been assigned early to the Activity Guarantee is situated lower at every number of days, the probability for them to have *left* unemployment is higher. Interpreted the other way, the figure shows that at any given length of spell of unemployment, the probability to remain unemployed is higher in the comparison group. This indicates a consistent effect over time. For example, Figure 3 shows that after 500 days the probability to still be unemployed is around 0.9 among those who entered the activity guarantee early. The probability to have left unemployment is thus 0.1. Since the effect of early treatment was an increase of 22 per cent, the probability associated with late assignment is 0.082. That is, the probability to stay in unemployment is 0.918. After 1 000 days of unemployment the probability to stay in unemployment is around 0.7 for the early treatment group and about 0.75 in the late treatment group. To get the effects on the number of days, Figure 3 is read the opposite way. At a probability of 0.5, the (median) duration of unemployment is 70 days shorter in the treatment group than in the comparison group.

**Figure 3**      *The probability to stay in unemployment (survive) given the days in unemployment between the treatment and the control group*



## 5. Concluding remarks

The objective of this study has been to demonstrate a methodology for estimating effects of a universal labor market policy program. In the case of the Swedish Activity Guarantee for hard-to-place unemployed job seekers, it was observed that employment offices in different regions applied differing principles regarding after how long duration of unemployment job seekers were referred to this program. Carefully looking into how the program was implemented by different employment offices disclosed a possibility of identifying a treatment and a control group, because offices in some regions systematically offered treatment, i.e. participation in the program, later during the unemployment period than offices in other regions. A more general interpretation of our procedure is that differences as regards implementation can make it possible to estimate effects also of universal programs, programs which in principle are open to all job seekers. However, the study also demonstrates that our approach can be very data intensive. Moreover, in the evaluation of the Activity Guarantee, some assumptions had to be made. For example, with the methodology used it was not possible to control

for local labor market conditions. This may, however, not have had an effect on the results obtained, since there were no indications of influential differences in this respect between regions where employment offices applied early assignment to the program and the other regions. If there had been large variations between regions, our result would have been a mix between program and regional effects. After 600 days all individuals, who are still unemployed, enter the Activity Guarantee. To interpret our results as the total result of participating in the Activity Guarantee, it has to be assumed that the effect of participation is the same for these newcomers (late treatment) as for those assigned early to the program and who have been in it for 300 days. If this is not the case, our results should be seen as effects of early participation in the program rather than of all participating, i.e. rather than as the effect of the program as such. If, however, the said assumption regarding effect after 600 days is satisfied, the effect of the program is the same as the effect of early treatment. Our estimates indicated favorable effects on the probability to leave unemployment for a full-time, unsubsidized job and on the duration of unemployment. Given that the assumptions stated holds, the Activity Guarantee program as such has had positive effects—the labor market outcomes for participants in the program have changed in a positive direction relative to what would have occurred in the absence of the program.

## References

- Angrist, J. D., and A. B. Krueger. 1999. Empirical strategies in labor economics. In *Handbook of Labor Economics*, eds. O. Ashenfelter and D. Card, Vol. 3A, 1277–1366. Amsterdam: North-Holland.
- Bellman, L., and R. Jackman. 1996. The Impact of Labor Market Policy on Wages. In *International Handbook of Labor Market Policy and Evaluation*, eds. G. Schmid, J. O'Reilly and K. Schömann, 725–46. Cheltenham: Edward Elgar.
- van den Berg G. J., and B. van der Klaauw. 2001. *Counseling and monitoring of unemployed workers: theory and evidence from a controlled social experiment*. Working paper 2001:2. Uppsala: IFAU – Institutet för arbetsmarknadspolitisk utvärdering.
- van den Berg, G. J., and K. Richardson. 2002. *The effect of vocational employment training on the individual transition rate from unemployment to work*. Working paper 2002:8. Uppsala: IFAU – Institutet för arbetsmarknadspolitisk utvärdering.
- Blossfeld, H-P., A. Hamerle and K. U. Mayer. 1989. *Event History Analysis*. Statistical theory and applications in the social sciences series, Lawrence Earlbaum Associates Publisher, New Jersey, USA.
- Carling, K., and L. Larsson. 2000. Att utvärdera arbetsmarknadsprogram i Sverige: Rätt svar är viktigt, men vilken var nu frågan? (To evaluate labour market programs in Sweden: Correct answer is important, but what was the question?) *Arbetsmarknad & Arbetsliv* 6:185–92.
- Delander, L., M. Hammarstedt, J. Månsson and E. Nyberg (2005), Integration of immigrants: The role of language proficiency and experience. *Evaluation Review* 29:24–41.



- Forslund, A., D. Froberg and L. Lindqvist. 2004. *The Swedish Activity Guarantee*. OECD Social, Employment and Migration Working Paper No.16. Paris: OECD.
- Forslund, A., P. Johansson and L. Lindqvist. 2005. Anställningsstöd – en väg från arbetslöshet till arbete? (Employment subsidies – A way from unemployment to work?). *Ekonomisk Debatt* 33:6–16.
- Government Bill 1999/2000: 98 Förnyad arbetsmarknadspolitik för delaktighet och tillväxt (New Labour market policy for involvement and growth), <http://www.sweden.gov.se/content/1/c4/21/69/2f841f0e.pdf> Bill 1999/2000:98.
- Hägglund, P. 2006. *Natural and Classical Experiments in Swedish Labor Market Policy*. Dissertation series 2006:1. Stockholm: Stockholm University.
- IUI. 2004. *Kvartalsrapport 2004–10–27* (Quarterly report 10/27 2004). Finspång: IUI.
- IUI. 2005. *Anvisning till aktivitetsgarantin eller förlängd period med arbetslöshetsersättning* (Assignment to the Activity Guarantee or prolonged unemployment benefit). Dnr 2005/1285. Finspång: IUI.
- Johansson, P., and S. Martinsson. 2001. Varför lyckades det nationella IT-programt, Swit? – En jämförelse mellan två arbetssätt (Why did the national it-program Swit succeed? A comparison between two methods of work). *Ekonomisk Debatt* 29:293–302.
- Maddala, G. S. 1983. *Limited Dependent and Qualitative Variables in Econometrics*. Econometric Society Monographs. Cambridge: Cambridge University Press.
- Nyberg, A. 2003. *Deltidsarbete och deltidarbetslöshet* (Part-time work and part-time unemployment). Working paper 2003:1, Stockholm: Arbetslivsinstitutet.
- Riksrevisionen. 2005. *Aktivitetsgarantin. Regeringens och AMS uppföljning och utvärdering* (The Activity guarantee: The Government and the National Labor Market Board's monitoring and evaluation). Report RiR 2005:17. Stockholm: Riksrevisionen.
- Rosenbaum, P. 2002. *Observational studies*. 2<sup>nd</sup> ed. New-York: Springer-Verlag.
- Rosenbaum, P., and D. Rubin. 1983. The central role of the propensity score in observational studies for causal effects. *Biometrika* 70:41–55.
- Yamaguchi, K. 1991. *Event history analysis*. Newbury Park, CA: Sage.

## Appendix

**Table A.1** Descriptive statistics for individuals who have reached 270 unemployment benefit days in regions with early treatment. *N* = 28 526

|  | Percent | Mean | Standard deviation | Min. | Max. |
|--|---------|------|--------------------|------|------|
| <i>Dependent variable</i>  |         |      |                    |      |      |
| Assigned to the Activity Guarantee   | 44 %    |      |                    |      |      |
| <i>Control variables</i>   |         |      |                    |      |      |
| Female   | 47 %    |      |                    |      |      |
| Age  |         | 44.6 | 12.57              | 20   | 65   |
| Age > 61   | 12 %    |      |                    |      |      |
| Expected transition within 120 days  | 15 %    |      |                    |      |      |
| Part-time unemployment contract  | 14 %    |      |                    |      |      |
| Searching only full-time   | 6 %     |      |                    |      |      |
| Searching only part-time   | 28 %    |      |                    |      |      |
| Prepared to move   | 13 %    |      |                    |      |      |
| Relevant education   | 66 %    |      |                    |      |      |
| Relevant work experience   | 85 %    |      |                    |      |      |
| <i>Education</i>   |         |      |                    |      |      |
| Upper secondary school   | 44 %    |      |                    |      |      |
| University degree  | 25 %    |      |                    |      |      |
| <i>Immigrated from</i>   |         |      |                    |      |      |
| Nordic   | 2 %     |      |                    |      |      |
| West European, North America and Oceania   | 1 %     |      |                    |      |      |
| East Europe  | 3 %     |      |                    |      |      |
| Other  | 2 %     |      |                    |      |      |
| <i>Handicap registered</i>   |         |      |                    |      |      |
| Impaired vision/hearing  | 1 %     |      |                    |      |      |
| Other physical disability  | 12 %    |      |                    |      |      |
| Social/mental disability   | 3 %     |      |                    |      |      |
| <i>Unemployment history before decision</i>  |         |      |                    |      |      |
| Registered time for the period before decision   |         | 750  | 864.12             | 0    | 4891 |
| Registered time in unemployment for the period before decision                             |         | 127  | 185.09             | 0    | 1784 |
| Sum of number of registered days at the employment office the last 6 years before decision |         | 1342 | 580.31             | 13   | 2190 |
| Sum of number of days in unemployment the last 6 years before decision                     |         | 738  | 367.09             | 0    | 2332 |
| Number of unemployment spells the last 6 years   |         | 7.1  | 4.14               | 0    | 38   |
| Number of Labor market programs the last 6 years   |         | 2.9  | 2.55               | 0    | 18   |
| <i>Year for decision</i>   |         |      |                    |      |      |
| Decision 2001  | 19 %    |      |                    |      |      |
| Decision 2002  | 18 %    |      |                    |      |      |
| Decision 2003  | 30 %    |      |                    |      |      |
| Decision 2004  | 33 %    |      |                    |      |      |

**Table A.2** Descriptive statistics for the population used in the probit and the Cox hazard regression in the evaluation. N=25 380

|  | Percent | Mean  | Standard deviation | Min. | Max.  |
|--|---------|-------|--------------------|------|-------|
| <i>Control variables</i>   |         |       |                    |      |       |
| Female   | 44 %    |       |                    |      |       |
| Age  |         | 45.11 | 11.74              | 20   | 65    |
| Age > 61   | 7 %     |       |                    |      |       |
| Searching only full-time   | 38 %    |       |                    |      |       |
| Searching only part-time   | 5 %     |       |                    |      |       |
| Prepared to move   | 16 %    |       |                    |      |       |
| Relevant education   | 64 %    |       |                    |      |       |
| Relevant work experience   | 85 %    |       |                    |      |       |
| <i>Education</i>   |         |       |                    |      |       |
| Upper secondary school   | 47 %    |       |                    |      |       |
| University degree  | 21 %    |       |                    |      |       |
| <i>Immigrant from</i>  |         |       |                    |      |       |
| Nordic   | 2 %     |       |                    |      |       |
| West Europe, North America and Oceania   | 1 %     |       |                    |      |       |
| East Europe  | 2 %     |       |                    |      |       |
| Other  | 3 %     |       |                    |      |       |
| <i>Handicap registered</i>   |         |       |                    |      |       |
| Impaired vision/hearing  | 1 %     |       |                    |      |       |
| Other physical disability  | 14 %    |       |                    |      |       |
| Social/mental disability   | 4 %     |       |                    |      |       |
| <i>Unemployment history before decision</i>  |         |       |                    |      |       |
| Unemployed without activities within the employment office                                 | 65 %    |       |                    |      |       |
| Sum of number of registered days at the employment office the last 6 years before decision |         | 1460  | 579                | 0    | 2 190 |
| Sum of number of days in unemployment the last 6 years before decision                     |         | 798   | 366                | 0    | 2 332 |
| Number of unemployment spells the last 6 years   |         | 7.71  | 4.14               | 0    | 38    |
| Number of Labor market programs the last 6 years   |         | 3.90  | 2.66               | 0    | 18    |
| Number of transitions between measures within the employment office the last 6 years       |         | 4.46  | 3.89               | 0    | 54    |
| <i>Year for decision</i>   |         |       |                    |      |       |
| 2001   | 22 %    |       |                    |      |       |
| 2002   | 19 %    |       |                    |      |       |
| 2003   | 19 %    |       |                    |      |       |
| 2004   | 40 %    |       |                    |      |       |

**Books published by members  
of the research unit Labor Mar-  
ket Policy and Employment**

(only available from commercial  
retailers)

Dietmar Dathe, Günther Schmid  
**Urbane Beschäftigungsdynamik.  
Berlin im Standortvergleich mit  
Ballungsregionen**  
2001  
Berlin, edition sigma  
175 pp.

Mathias Eberling, Volker Hielscher,  
Eckart Hildebrandt, Kerstin Jürgens  
**Prekäre Balancen. Flexible Arbeits-  
zeiten zwischen betrieblicher  
Regulierung und individuellen  
Ansprüchen**  
2004  
Berlin, edition sigma  
279 pp.

Werner Eichhorst, Stefan Profit, Eric  
Thode  
in collaboration with the "Benchmarking"  
team at the „Bündnis für Arbeit, Ausbil-  
dung und Wettbewerbsfähigkeit“  
Alliance: Gerhard Fels, Rolf G. Heinze,  
Heide Pfarr, Günther Schmid, Wolfgang  
Streeck  
**Benchmarking Deutschland: Arbeits-  
markt und Beschäftigung. Bericht der  
Arbeitsgruppe Benchmarking und der  
Bertelsmann-Stiftung**  
2001  
Berlin/Heidelberg/New York, Springer  
440 pp.

Jürgen Gabriel, Michael Neugart (eds.)  
**Ökonomie als Grundlage politischer  
Entscheidungen**  
2001  
Opladen, Leske + Budrich  
343 pp.

Silke Gülker, Christoph Hilbert,  
Klaus Schömann  
**Lernen von den Nachbarn. Qualifika-  
tionsbedarf in Ländern der OECD**  
2000  
Bielefeld, W. Bertelsmann Verlag  
126 pp.

Markus Gangl  
**Unemployment Dynamics in the  
United States and West Germany.  
Economic Restructuring, Institutions  
and Labor Market Processes**  
2003  
Heidelberg, New York: Physica/Springer  
300 pp.

Miriam Hartlapp  
**Die Kontrolle der nationalen Rechts-  
durchsetzung durch die Europäische  
Union**  
2005  
Köln, Campus Verlag  
254 S.

Werner Jann, Günther Schmid (eds.)  
**Eins zu eins? Eine Zwischenbilanz  
der Hartz-Reformen am Arbeitsmarkt**  
2004  
Berlin: edition sigma  
112 pp.

Max Kaase, Günther Schmid (eds.)  
**Eine lernende Demokratie - 50 Jahre  
Bundesrepublik Deutschland  
WZB-Jahrbuch 1999**  
1999  
Berlin, edition sigma  
586 pp.

Hartmut Kaelble, Günther Schmid (eds.)  
**Das europäische Sozialmodell.  
Auf dem Weg zum transnationalen  
Sozialstaat  
WZB-Jahrbuch 2004**  
2004  
Berlin, edition sigma  
455 pp.

Jaap de Koning and Hugh Mosley (eds.)  
**Labour Market Policy and Unemployment: Impact and Process Evaluations in Selected European Countries**  
2001  
Cheltenham, UK, Edward Elgar  
317 pp.

Hugh Mosley, Jacqueline O'Reilly, Klaus Schömann (eds.)  
**Labour Markets, Gender and Institutional Change. Essays in Honour of Günther Schmid**  
2002  
Cheltenham, UK, Edward Elgar  
382 pp.

Hugh Mosley, Holger Schütz, Günther Schmid with the collaboration of Kai-Uwe Müller  
**Effizienz der Arbeitsämter: Leistungsvergleich und Reformpraxis, Reihe „Modernisierung des öffentlichen Sektors“**  
2003  
Berlin, edition sigma  
179 pp.

Ralf Mytzek, Klaus Schömann (eds.)  
**Transparenz von Bildungsabschlüssen in Europa. Sektorale Studien zur Mobilität von Arbeitskräften**  
2004  
Berlin, edition sigma  
198 pp.

Michael Neugart, Klaus Schömann (eds.)  
**Forecasting Labour Markets in OECD Countries. Measuring and Tackling Mismatches**  
2002  
Cheltenham, UK, Edward Elgar  
322 pp.

Jacqueline O'Reilly, Colette Fagan (eds.)  
**Part-Time Prospects. An International Comparison**  
1998  
London/New York, Routledge  
304 pp.

Jacqueline O'Reilly, Inmaculada Cebrián and Michel Lallemand (eds.)  
**Working-Time Changes: Social Integration Through Transitional Labour Markets**  
2000  
Cheltenham, UK, Edward Elgar  
369 pp.

Jacqueline O'Reilly (ed.)  
**Regulating Working-Time Transitions in Europe**  
2003  
Cheltenham, UK, Edward Elgar  
325 pp.

Birgitta Rabe  
**Implementation von Arbeitsmarktpolitik durch Verhandlungen. Eine spieltheoretische Analyse**  
2000  
Berlin, edition sigma  
254 pp.

Stefan Ramge, Günther Schmid (eds.)  
**Management of Change in der Politik? Reformstrategien am Beispiel der Arbeitsmarkt- und Beschäftigungspolitik. Ein Werkstattbericht.**  
Gesellschaft für Programmforschung, GfP (ed.), Bd. 55 der Reihe „Schnittpunkte von Forschung und Politik“,  
2003  
New York, München, Berlin: Waxmann  
165 pp.

Günther Schmid, Jacqueline O'Reilly,  
Klaus Schömann (eds.)  
**International Handbook of Labour  
Market Policy and Evaluation**  
1996  
Cheltenham, UK, Edward Elgar  
954 pp.

Günther Schmid, Bernard Gazier (eds.)  
**The Dynamics of Full Employment.  
Social Integration Through Transi-  
tional Labour Markets**  
2002  
Cheltenham, UK, Edward Elgar  
443 pp.

Günther Schmid  
**Wege in eine neue Vollbeschäftigung.  
Übergangsmärkte und aktivie-  
rende Arbeitsmarktpolitik**  
2002  
Frankfurt/Main, Campus  
477 pp.

Holger Schütz, Hugh Mosley (Hg.)  
**Arbeitsagenturen auf dem Prüfstand.  
Leitungsvergleich und Reformpraxis  
der Arbeitsvermittlung**  
2005  
Berlin, edition sigma  
351 S.

Sylvia Zühlke  
**Beschäftigungschancen durch beruf-  
liche Mobilität? Arbeitslosigkeit,  
Weiterbildung und Berufswechsel in  
Ostdeutschland**  
2000  
Berlin, edition sigma,  
206 pp.

The Research Area "Employment, Social Structure, and Welfare State" has existed since 1 January 2003. It encompasses the research units "Labor Market Policy and Employment" and "Inequality and Social Integration" and the research group "Public Health".

---

**Research Unit  
Labor Market Policy  
and Employment**

**Discussion Papers 2003**

Carroll Haak  
**Weiterbildung in kleinen und mittleren Betrieben: Ein deutsch-dänischer Vergleich**  
Order number: SP I 2003-101

Günther Schmid  
**Gleichheit und Effizienz auf dem Arbeitsmarkt: Überlegungen zum Wandel und zur Gestaltung des „Geschlechtervertrages“**  
Order number: SP I 2003-102

Holger Schütz  
**Controlling von Arbeitsverwaltungen im internationalen Vergleich**  
Order number: SP I 2003-103

Stefan Schröter  
**Berufliche Weiterbildung in Großbritannien für gering qualifizierte Arbeitskräfte**  
Order number: SP I 2003-104

Magnus Lindskog  
**Forecasting and responding to qualification need in Sweden**  
Order number: SP I 2003-105

Heidi Oschmiansky und Frank Oschmiansky  
**Erwerbsformen im Wandel: Integration oder Ausgrenzung durch atypische Beschäftigung? Berlin und die Bundesrepublik Deutschland im Vergleich**  
Order number: SP I 2003-106

Katrin Vitols  
**Entwicklungen des Qualifikationsbedarfs in der Bankenbranche**  
Order number: SP I 2003-107

Achim Kemmerling  
**Die Rolle des Wohlfahrtsstaates in der Entwicklung unterschiedlicher Dienstleistungssektoren – Wohlfahrtsstaatsregime und Dienstleistungsbeschäftigung**  
Order number: SP I 2003-108

Thomas A. DiPrete, Dominique Goux, Eric Maurin, Amélie Quesnel-Vallée  
**Work and Pay in Flexible and Regulated Labor Markets: A Generalized Perspective on Institutional Evolution and Inequality Trends in Europe and the U.S.**  
Order number: SP I 2003-109

**Discussion Papers 2004**

Thomas A. DiPrete, Markus Gangl  
**Assessing Bias in the Estimation of Causal Effects: Rosenbaum Bounds on Matching Estimators and Instrumental Variables Estimation with Imperfect Instruments**  
Order number: SP 1 2004-101

Andrea Ziefle  
**Die individuellen Kosten des Erziehungsurlaubs: Eine empirische Analyse der kurz- und längerfristigen Folgen für den Karriereverlauf von Frauen**  
Order number: SP 1 2004-102

Günther Schmid, Silke Kull  
**Die Europäische Beschäftigungsstrategie. Anmerkungen zur "Methode der offenen Koordinierung"**  
Order number: SP 1 2004-103

Hildegard Theobald  
**Entwicklung des Qualifikationsbedarfs im Gesundheitssektor: Professionalisierungsprozesse in der Physiotherapie und Dentalhygiene im europäischen Vergleich**  
Order number: SP 1 2004-104

Magnus Lindskog  
**Labour market forecasts and their use – Practices in the Scandinavian countries**  
Order number: SP 1 2004-105

Hildegard Theobald  
**Unternehmensberatung: Veränderter Qualifikationsbedarf und neue Ansätze in Ausbildung und Regulierung des Berufszugangs**  
Order number: SP 1 2004-106

Günther Schmid  
**Gewährleistungsstaat und Arbeitsmarkt Neue Formen von Governance in der Arbeitsmarktpolitik**  
Order number: SP I 2004-107

Karin Schulze Buschoff  
**Neue Selbstständigkeit und wachsender Grenzbereich zwischen selbstständiger und abhängiger Erwerbsarbeit – europäische Trends vor dem Hintergrund sozialpolitischer und arbeitsrechtlicher Entwicklungen**  
Order number: SP 1 2004-108

Christoph Hilbert  
**Performanzmessung und Anreize in der regionalen Arbeitsvermittlung: Der Schweizer Ansatz und eine Modellrechnung für Deutschland**  
Order number: SP 1 2004-109

Günther Schmid  
**Soziales Risikomanagement durch Übergangsarbeitsmärkte**  
Order number: SP I 2004-110

Lennart Delander, Jonas Månsson, Erik Nyberg  
**Using the Unemployed as Temporary Employment Counsellors: Evaluation of an Initiative to Combat Long-Term Unemployment**  
Order number: SP I 2004-111

## Discussion Papers 2005

Achim Kemmerling, Oliver Bruttel  
**New Politics in German Labour Market Policy? The Implications of the Recent Hartz Reforms for the German Welfare State**  
Order number: SP I 2005-101

Kamil Zawadzki  
**Transitional Labour Markets in a Transitional Economy. Could They Work? The Example of Poland**  
Order number: SP I 2005-102

Magnus Lindskog  
**The Swedish Social Insurance System for the Self-Employed**  
Order number: SP I 2005-103

Rebecca Boden  
**The UK social security system for self-employed people**  
Order number SP I 2005-104

Philip Wotschack  
**Household Governance and Time Allocation – Structures and Processes of Social Control in Dutch Households**  
Order number SP I 2005-105

Holger Schütz, Peter Ochs  
**Das Neue im Alten und das Alte im Neuen - Das Kundenzentrum der Bundesagentur für Arbeit: Die öffentliche Arbeitsvermittlung zwischen inkrementellen und strukturellen Reformen**  
Order number: SP I 2005-106

Carroll Haak  
**Künstler zwischen selbständiger und abhängiger Erwerbsarbeit**  
Order number: SP I 2005-107



Ralf Mytzek-Zühlke  
**Einflussfaktoren betrieblicher  
Weiterbildungsaktivität in Dänemark,  
Schweden, Deutschland und dem  
Vereinigten Königreich.**

Analysen der Mikrodaten der zweiten  
Europäischen Weiterbildungserhebung  
(CVTS2)

Order number: SP I 2005-108

Oliver Bruttel  
**Contracting-out and Governance  
Mechanisms in the Public Employ-  
ment Service**

Order number: SP I 2005-109

Colette Fagan, Jacqueline O'Reilly,  
Brendan Halpin  
**Job opportunities for whom? Labour  
market dynamics and service sector  
employment growth in Germany and  
Britain**

Order number SP I 2005-110

Monique Aerts  
**The Dutch Social Insurance System  
for Self-Employed**

Order number SP I 2005-111

## Discussion Papers 2006

Günther Schmid  
**Sharing Risks. On Social Risk Man-  
agement and the Governance of  
Labour Market Transitions**

Order number SP I 2006-101

Rosie Page, Jim Hillage  
**Vocational Education and Training in  
the UK. Strategies to overcome skill  
gaps in the workforce**

Order number SP I 2006-102

Anton Hemerijck  
**Recalibrating Europe's Semi-  
Sovereign Welfare States**

Order number SP I 2006-103

Paul Ryan, Howard Gospel, Paul Lewis  
**Large Employers and Apprenticeship  
Training in Britain**

Order number SP I 2006-104

Lorenz Lassnigg  
**Approaches for the anticipation of  
skill needs in the perspective of  
"Transitional Labour Markets" – the  
Austrian experience**

Order number: SP I 2006-105

Paula Protsch  
**Lebens- und Arbeitsqualität von  
Selbstständigen.**

Objektive Lebens- und Arbeits-  
bedingungen und subjektives  
Wohlbefinden einer heterogenen  
Erwerbsgruppe

Order number: SP I 2006-106

Karin Schulze Buschhoff  
**Die soziale Sicherung von selbst-  
ständig Erwerbstätigen in  
Deutschland**

Order number SPI 2006-107

Janine Leschke, Günther Schmid, Dorit  
Griga

**On the Marriage of Flexibility and  
Security: Lessons from the Hartz-  
Reforms in Germany**

Order number SP I 2006-108

Anders Stenberg  
**Skill Needs and Continuing  
Vocational Training in Sweden**

Order Number SP I 2006-109

Philip Wotschack, Rafael Wittek  
**Negotiating Work and Household  
Demands.**

Effects of Conflict Management Strate-  
gies in Dutch Households on the Labor  
Supply of Male and Female Employees

Order number: SP I 2006-110

Christian Brzinsky-Fay  
**Lost in Transition - Labour Market  
Entry Sequences of School Leavers  
in Europe**

Order number SP I 2006-111

Jaap de Koning, Hassel Kroes, Alex van der Steen

**Patterns of Work and Use of Benefits over the Life Course: Estimates and simulations based on Dutch micro-data**

Order number SP I 2006-112

Michael Neugart

**Labor Market Policy Evaluation with an Agent-based Model**

Order number SP I 2006-113

Miriam Hartlapp

**Über Politiklernen lernen. Überlegungen zur Europäischen Beschäftigungsstrategie**

Order number: SP I 2006-114

Philip Wotschack

**Lebenslaufpolitik in den Niederlanden.**

Gesetzliche Optionen zum Ansparen längerer Freistellungen: „verlofspaarregeling“ und „levensloopregeling“

Order number: SP I 2006-115

Kai-Uwe Müller, Frank Oschmiansky

**Die Sanktionspolitik der Arbeitsagenturen nach den „Hartz“-Reformen**

Analyse der Wirkungen des „Ersten Gesetzes für moderne Dienstleistungen am Arbeitsmarkt“

Order number: SP I 2006-116

Klaus Schömann, Liuben Siarov, Nick van den Heuvel

**Managing social risks through transitional labour markets**

Order number: SP I 2006-117

**Wayne Vroman, Vera Brusentsev  
Unemployment and Unemployment Compensation from a Global Perspective**

Order number: SP I 2006-118

Achim Kemmerling

**Diffusion und Interaktion in der Arbeitsmarktpolitik? Positive und negative Ansteckungseffekte am Beispiel zweier Reformdiskussionen**

Order number: SP I 2006-119

Michael Neugart

**Pensions with early retirement and without commitment**

Order number: SP I 2006-120

Morten Lassen, John Houman Sørensen, Anja Lindkvist Jørgensen, Rasmus Juul Møberg

**Skill Needs and the Institutional Framework Conditions for Enterprise-Sponsored CVT - The Case of Denmark**

Order number: SP I 2006-121

Karin Schulze Buschoff, Claudia Schmidt

**Own-Account Workers in Europe  
Flexible, mobile, and often inadequately insured**

Order number: SP I 2006-122

Carroll Haak

**Mehrfachbeschäftigung, Bildung und Einkommen auf den Arbeitsmärkten von Künstlern**

Order Number: SP I 2006-123

**Discussion Papers 2007**

Petra Kaps, Holger Schütz

**Privatisierung von Arbeitsvermittlungsdienstleistungen – Wundermittel zur Effizienzsteigerung?  
Eine Bestandsaufnahme deutscher und internationaler Erfahrungen**

Order number: SP I 2007-101

**Lennart Delander, Jonas Månsson  
Forensic evaluation: A strategy for and results of an impact evaluation of a universal labor market program – The Swedish Activity Guarantee**

Order number: SP I 2007-102



Bei Ihren Bestellungen von WZB-Papers schicken Sie bitte unbedingt einen an Sie adressierten Aufkleber mit sowie je paper eine Briefmarke im Wert von 0,51 Euro oder einen "Coupon Réponse International " (für Besteller aus dem Ausland)

Please send a self addressed label and postage stamps in the amount of 0,51 Euro or one "Coupon-Réponse International" (if you are ordering from outside Germany) for each WZB-paper requested

**Bestellschein**

**Order Form**

**Absender / Return Address:**

Wissenschaftszentrum Berlin  
für Sozialforschung  
Presse- und Informationsreferat  
Reichpietschufer 50

D-10785 Berlin-Tiergarten

---

---

---

---

**Hiermit bestelle ich folgende(s)  
Discussion paper(s):**

**Please send me the following  
Discussion paper(s):**

| Bestell-Nr. / Order no. | Autor/in, Kurztitel / Author(s) / Title(s) in brief |
|-------------------------|---|
|                         |   |